

ATTACHMENT I TO IPN-93- 019

PROPOSED TECHNICAL SPECIFICATION CHANGES

RELATED TO

**TURBINE BUILDING LEVEL SENSOR TESTING
TO ACCOMMODATE A 24 MONTH OPERATING CYCLE**

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

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TABLE 4.1-1 (Sheet 3 of 5)

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
23. Temperature Sensor in Auxiliary Boiler Feedwater Pump Building	N.A.	N.A.	18M	
24. Temperature Sensors in Primary Auxiliary Building				
a. Piping Penetration Area	N.A.	N.A.	18M	
b. Mini-Containment Area	N.A.	N.A.	18M	
c. Steam Generator Blowdown Heat Exchanger Room	N.A.	N.A.	18M	
25. Level Sensors in Turbine Building	N.A.	N.A.	24M	
26. Volume Control Tank Level	N.A.	18M	N.A.	
27. Boric Acid Makeup Flow Channel	N.A.	18M	N.A.	
28. Auxiliary Feedwater:				
a. Steam Generator Level	S	18M	Q	Low-Low
b. Undervoltage	N.A.	18M	18M	
c. Main Feedwater Pump Trip	N.A.	N.A.	18M	
29. Reactor Coolant System Subcooling Margin Monitor	D	18M	N.A.	
30. PORV Position Indicator	N.A.	N.A.	24M	Limit Switch
31. PORV Position Indicator	D	24M	24M	Acoustic Monitor
32. Safety Valve Position Indicator	D	24M	24M	Acoustic Monitor
33. Auxiliary Feedwater Flow Rate	N.A.	18M	N.A.	

Amendment No. 38, 63, 74, 93, 100, 107, 123, 127.

ATTACHMENT II TO IPN-93- 019

SAFETY EVALUATION

RELATED TO

**TURBINE BUILDING LEVEL SENSOR TESTING
TO ACCOMMODATE A 24 MONTH OPERATING CYCLE**

TECHNICAL SPECIFICATION CHANGES

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
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Section I - Description of Changes

This application for amendment to the Indian Point 3 Technical Specifications proposes to change the frequency of Turbine Building level sensor testing to 24 months.

Section II - Evaluation of Changes

Starting with cycle nine (August, 1992), Indian Point 3 began operating on 24 month cycles, instead of 18 month cycles. The level sensors can be tested at power, so there is no burden for testing the Turbine Building level sensors at power. However, the Authority is requesting this extension to decrease the overall frequency of testing. In order to justify extending surveillance intervals to be consistent with the length of the operating cycle, the following factors were considered: the importance of the refueling tests (i.e., does on-line testing demonstrate operability, or are failures only being detected during the refueling tests?), and past equipment performance (and the effect on system safety functions). Below is an evaluation for the Turbine Building (lower level) level sensors technical specification that this application proposes to change.

Turbine Building (Lower Level) Level Sensors test

In the event of flooding due to circulating water system line or expansion joint failure, a four foot high dike is erected around the entrance to the elevation 15' of the Control Building from the Turbine Hall. This prevents disabling the vital 480 volt electrical switchgear in the adjoining Control Building. In addition to this, redundant level alarm switches are installed in the pipe tunnel at elevation 3'3" of the Turbine Hall. These switches will sense high water in the condenser trench and give an indication in the Central Control Room (CCR).

The purpose of this test is to demonstrate the operability of the level sensors in the condenser trench on the 3'3" elevation of the Turbine Building. This procedure includes: 1) manually manipulating the float ball vertically upward to activate the sensor, 2) verifying that the applicable "Condenser Trench Hi Water Level" alarm annunciates on the SDF panel in the CCR, 3) inspecting the condition of the contact wires, and 4) verifying free vertical movement of the float ball.

A review of surveillance test records (1986-1992) shows satisfactory test results for the tests conducted on September 2, 1986, May 4, 1987, February 17, 1989, July 18, 1990, and April 19, 1992. Additionally, a review of the Maintenance Department Work History database revealed only one work request for the turbine hall sump level float switches. This maintenance activity replaced the switch assembly and repaired conductor insulation in August 1989, because of corrosion. Since that time, a review of the work request databases identified no additional corrective maintenance activities related to these devices. This review shows that the Turbine Building level sensors are reliable.

In addition to the four foot dike protecting the entrance of the Control Building, the level sensors are provided to detect high water level in the condenser trench. These two features allow the operator at least twenty minutes to investigate a problem and take appropriate action. As a

result, sufficient redundancy exists to ensure that the 480 volt electrical switchgear located in the Control Building will be protected in the event of flooding in the Turbine Building.

Testing and inspection of the Turbine Building (lower level) level sensors can be safely extended with the longer operating cycle because: 1) a review of surveillance test records, operating occurrence reports and maintenance work requests substantiates the reliability of these devices, and 2) the level sensors are redundant ensuring that the 480 volt switchgear will be protected in the event of Turbine Hall flooding.

Section III - No Significant Hazards Evaluation

Consistent with the criteria of 10 CFR 50.92, the enclosed application is judged to involve no significant hazards based on the following information:

- (1) Does the proposed license amendment involve a significant increase in the probability or consequences of any accident previously evaluated?

Response:

The proposed change does not involve a significant increase in the probability or consequences of any accident previously analyzed. This change proposes extending the surveillance intervals for the functional test Turbine Building (lower level) level sensors. The change does not involve any physical changes to the plant, nor does it alter the way any equipment functions. An evaluation of past equipment performance and other system testing (e.g., quarterly tests) provides assurance that the longer surveillance intervals will not degrade system performance. Regarding the probability of equipment malfunctions:

Testing and inspection of the Turbine Building (lower level) level sensors can be safely extended with the longer operating cycle because: 1) a review of surveillance test records, operating occurrence reports and maintenance work requests substantiates the reliability of these devices, and 2) the level sensors are redundant ensuring that the 480 volt switchgear will be protected in the event of Turbine Hall flooding.

- (2) Does the proposed license amendment create the possibility of a new or different kind of accident from any previously evaluated?

Response:

The possibility of an accident or malfunction of a different type than evaluated previously in the safety analysis report is not created.

The proposed change extends surveillance test intervals. The proposed change does not change the manner in which these systems function. An evaluation of past equipment performance, system redundancy and on-line testing shows the longer surveillance test intervals will not degrade equipment covered by this test. Therefore, the proposed change does not create any new failure modes or a new accident.

- (3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response:

The margin of safety as defined in the bases for any technical specification is not reduced.

The proposed change does not reduce the margin of safety as defined in the bases for any Technical Specifications. The proposed change extends surveillance test intervals. Evaluation of the past performance of the equipment indicates that the effects of extending the surveillance test intervals would not involve a significant reduction in the margin of safety.

Section IV - Impact of Changes

These changes will not adversely impact the following:

ALARA Program
Security and Fire Protection Programs
Emergency Plan
FSAR and SER Conclusions
Overall Plant Operations and the Environment

Section V - Conclusions

The incorporation of this change: a) will not increase the probability nor the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Safety Analysis Report; b) will not increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report; c) will not reduce the margin of safety as defined in the bases for any technical specification; d) does not constitute an unreviewed safety question; and e) involves no significant hazards considerations as defined in 10 CFR 50.92.

Section VI - References

- 1) IP3 SER
- 2) IP3 FSAR Section 10.2.4.